RockREMOTE

Resilient satellite and cellular connectivity for remote industrial equipment

RockREMOTE is an industrial communications gateway designed to keep remote assets connected where cellular coverage is unreliable or unavailable.

It combines LTE cellular with Iridium Certus 100 satellite connectivity, automatically switching between networks according to the configured routing strategy. Ethernet, optional Wi-Fi, serial and GPIO interfaces support integration with existing PLCs, RTUs, sensors and SCADA equipment.

A Linux-based platform provides local processing and supports IP and message-based communications, while Cloudloop Device Manager enables remote configuration, monitoring and software management across deployed devices. RockREMOTE is designed for fixed industrial installations in cabinets, equipment rooms and other sheltered environments.

KEY FEATURES

Satellite and cellular connectivity

Use LTE where available, with Iridium Certus 100 providing connectivity beyond reliable cellular coverage.

Automatic network switching

Automatically switch between LTE and Iridium satellite connectivity according to the configured routing strategy.

IP and message-based communications

Use Certus 100 IP connectivity at 22 Kbps upload and 88 Kbps download, or Iridium Messaging Transport for payloads up to 100 KB.

Industrial equipment integration

Connect PLCs, RTUs, sensors and other equipment through Ethernet, serial and isolated GPIO interfaces.

Edge processing and IoT integration

Run applications on the Linux-based platform and use MQTT, APIs and IMT services to process and route data efficiently.

Remote device management

Configure, monitor and update deployed terminals remotely using Cloudloop.

Flexible cabinet installation

Use RockREMOTE on a desktop or mount it securely to an IEC/EN 60715 DIN rail inside a protected enclosure or equipment cabinet.

TECHNICAL CHARACTERISTICS

PHYSICAL, ENVIRONMENTAL & POWER

Dimensions	193.3 x 120.3 x 117 mm
Weight	1.263 kg
Form Factor	Steel enclosure for indoor or sheltered installation
Ingress Protection	IP5x dust protection
Operating Temperature	−40 °C to +70 °C
Mounting	Desktop placement or IEC/EN 60715 DIN rail mounting
Input Voltage	10–30 V DC
Power Consumption	0.2 W sleep; 5 W idle; 9 W transmit
Certifications	Certus 100 IoT certified; CE, FCC and RoHS compliant

SYSTEM & COMMUNICATIONS

Processor & Memory	Quad-core 1.5 GHz; 2 GB RAM; 8 GB flash
Operating System	Linux-based OS
Satellite Service	Iridium Certus 100 IP and Iridium Messaging Transport
IP Data Rate	22 Kbps upload; 88 Kbps download
IMT Message Size	1-100,000 bytes (25 bytes minimum billable size)
Cellular	LTE Cat 1 and Cat 4; region-specific variants
WAN Failover	Automatic switching between LTE and Iridium
GNSS	Multi-constellation GNSS
Wi-Fi	Optional 2.4 GHz 802.11n

INTERFACES & CONNECTIONS

Ethernet	1 x RJ45 Ethernet
Serial	1 x RS-232; 1 x configurable RS-422/RS-485
Digital I/O	8 isolated GPIOs
Iridium Antenna	External Iridium antenna connection
SIM Cards	2 x standard 2FF; Iridium and cellular

MANAGEMENT & DEVELOPMENT

Local Management	Browser-based management via Ethernet or Wi-Fi
Remote Management	Cloudloop Device Manager
Network Management	Configurable routing, connection strategies and firewall
IoT Gateway & APIs	MQTT gateway, REST APIs, raw IMT and FTP over IMT
Local Services & APIs	NTP server and local APIs for system, connectivity, GNSS and time